Fairmont Bridge
Spanning the Ogden River at Fairmont
Ogden Canyon
Weber County
Utah

HAER No. UT-58

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Engineering Record
Rocky Mountain Regional Office
National Park Service
U. S. Department of the Interior
P. O. Box 25287
Denver, Colorado 80225

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HISTORIC AMERICAN ENGINEERING RECORD

Fairmont Bridge

HAER No. UT-58

Location:	Spanning the Ogden River at Fairmont in Ogden Canyon, Weber County, Utah UTM: A 12.4565670.424430 B 12.4565720.424430 Quad: Ogden, Utah
Date of Construction:	Circa 1910
Present Owner:	Ogden Water Users Association, Ogden, Utah
Present Use:	Vehicular and pedestrian bridge - to be replaced by a new vehicular and pedestrian bridge. Bridge was removed in August 1989.
Significance:	The Fairmont Bridge is a single span Pratt pony truss bridge, constructed circa 1910. It is one of the few examples of a pony truss with pin connections built in the State of Utah.
Historian:	Don Southworth Office of Public Archaeology September 1989

I. HISTORY

A. Ogden Canyon and the Bridge

The historical development of Ogden Canyon is closely linked to growth within Ogden Valley. The city of Ogden was named after the fur trapper, Peter Skene Ogden, although his activities in this region were actually within Ogden Valley near the present-day towns of Eden, Liberty and Huntsville. In 1844-45, Miles Goodyear established the first permanent white settlement near the center of present Ogden City. The city continued to grow and flourish but, as of 1854, records indicate that there was still no road through the formidable Ogden Canyon.[1]

A road through the canyon was eventually surveyed in 1857 and construction began in 1858. The great demand for wood for construction and fuel was instrumental in encouraging settlers to attempt this "taming" of the canyon, as there were reports of bountiful timber resources beyond.[2] However, before the road was constructed, logging was carried out at the mouth of the canyon. After 1858, the timber in Ogden Canyon became more readily available to the lumber industry. and several sawmills were constructed within the canyon corridors.[3]

The nature of this rugged canyon, with the turbulent Ogden River flowing through it, implies that bridges have always been an integral part of development in the canyon, as the majority of resorts and residences were located across the Ogden River and accessed only by bridges. However, only a few early bridges are mentioned in historical records. "The first three bridges in Ogden Canyon were constructed under the supervision of Isaac N. Goodale, the first being built in 1860."[4] The locations and types of structures built are not mentioned. It is known that one early structure, the Shanghai Bridge, was located above the old damsite and "is now under hundreds of feet of water."[5] This was apparently a log stringer that wAs constructed sometime prior to 1870 as indicated by historical accounts of accidents on the bridge.[6]

In the early 1880s, electricity to Ogden was supplied by a power plant which had been built at the mouth of Ogden Canyon.[7] Since that time, facilities have been improved with the construction of Pine View Reservoir by the Public Works Administration in 1936-37, which supplies power to the Pioneer Power Station.[8]

Ogden Canyon was also viewed as a popular and pleasant area for recreational retreat, beginning as early as 1870 when the first resort, "Idlewood," was constructed near the mouth of the canyon.[9]

Since that time, development of recreational facilities, business and state projects, and both year-round and summer residential communities has increased. Most of these communities are located across the Ogden River along the north slope of the canyon, with access by way of bridges. Access to Fairmont, one of these residential communities, is limited to use of a Pratt pony truss bridge known As the Fairmont Bridge.

B. Construction Chronology

The original construction date and origin of the Fairmont Bridge is not known. The bridge is believed to have been moved to the Fairmont area of Ogden Canyon during the 1930s and may have originated in Weber Canyon.[10] Its lightweight construction and similarity to another Pratt pony truss which was formerly located at Henefer, Utah, suggests a construction date of circa 1910.

There is no doubt that the Fairmont Bridge was moved from another location. The connecting plates which hold the long top chord and the top chord to the incline post were originally riveted. These plates have had some of the rivets removed for dismantling and bolts used in their place. Connecting points for the vertical members show the same signs of dismantling. The wood deck and stringers have also been replaced over the years as they wore out. Since the bridge was located on a private road, no records were kept on the movement, repair or maintenance of the structure

II. THE BRIDGE

A. Description

The Fairmont Bridge is a single-span, pin connected, steel Pratt pony truss. This structure carries a single lane of vehicular and pedestrian traffic across the Ogden River, from State Route 39 to the resort and residential community of Fairmont. This access road is private and carries only local residents across the river. The bridge road is also one of three bridges that give access to the Ogden Conduit for the Bureau of Reclamation and the Ogden Water Users Association.

The bridge is constructed of steel and wood in a lightweight design. The truss members are steel with lattice work used to tie the two halves of the inclined end posts and top chords together. The top chords measure 39 feet 9 inches long and each inclined end post is 13 feet 2 inches in length. The lower chords are double eye bars pinned at their connecting points, while the vertical members are double steel "I" beams with iron plate connectors. The center panel 19 feet

1 inch in length, has two light, eye bar diagonals in an "X" shape. Each diagonal member measures 21 feet 6 inches long from corner to corner and is a 7/8-inch-thick round bar. The diagonal in each of the end panels measures 13 feet in length and is comprised of a set of double eye bars of the same weight as the lower chords.

The overall length of the bridge is 60 feet and its width is 16 feet. The deck is constructed of wood plants (1 foot by 3 inches by 16 feet) resting on thirteen wood stringers. The stringers sit upon steel "I" beam braces which are connected both by bottom lateral bracing and joined with vertical members. Wood runners, four planks wide, run the full length of the bridge decking.

The entire bridge structure rests upon two concrete abutments. These abutments appear to have supported another bridge prior to the steel Pratt pony truss. The north abutment has two stone masonry wings that appear to be from a previous structure. This abutment also seems to have its concrete poured over the old stone abutment. The south abutment does not show any sign of a previous stone abutment. This may be due to the removal of the former abutment or covering of the old abutment by the concrete used to build a new one.

B. Modification

Other than the signs of dismantling and modifications to the abutment, the bridge does not show any signs of major structural alterations. The addition of chain link fencing and the upgrading of the wood deck are the only other modifications made to the bridge since its movement to the Fairmont area.

C. Ownership and Future

While the original ownership of the bridge may be in question, it is probable that the bridge belonged to one of the various county or state road commissions and sold to the resort community of Fairmont to replace an older non-steel/truss bridge. The bridges in Ogden Canyon have not been maintained on the inventory of the Utah Department of Transportation nor in the records of the Weber County Engineer. The bridge has been used and maintained by Fairmont.

Since the Fairmont Bridge is also one of the main accesses to the Ogden Conduit located along the north side of Ogden Canyon, the Ogden Water Users Association and the Bureau of Reclamation have found it necessary to replace the bridge with one that can carry heavier loads. The replacement of the bridge stems from the need to move heavy equipment into the area, while construction is completed on the replacement of the old wood stave Ogden Conduit with a new metal pipe. The bridge will be dismantled and replaced with a new bridge.

III. FOOTNOTES

1. Newey, LaVerna Burnett, Remember My Valley, p. 17.
2. Ibid., p. 36.
3. Roberts, Richard C. and Richard W. Sadler, Ogden: Junction City, p. 68.
4. Hunter, Milton R., Beneath Ben Lomond's Peak, p. 386.
5. Newey, p. 41.
6. Newey, p. 42.
7. Utah Historical Records Survey Project, A History of Ogden, p. 57.
8. Roberts, p. 128.
9. Newey, p. 39.
10. Utah Department of Transportation, Truss Bridge Rating Sheet, Bridge #29C-1.

IV. BIBLIOGRAPHY

A. Books

Hunter, Milton R., Beneath Ben Lomond's Peak: A History of Weber County, 1824-1900, Salt Lake City, Utah; Daughters of the Utah Pioneers; The Deseret News Press, 1944.

Newey, LaVerna Burnett, Remember My Valley, Salt Lake City, Utah; Hawkes Publishing, Inc., 1977.

Roberts, Richard C. and Richard W. Sadler, Ogden: Junction City, Northridge, California; Windsor Publications, Inc., 1985.

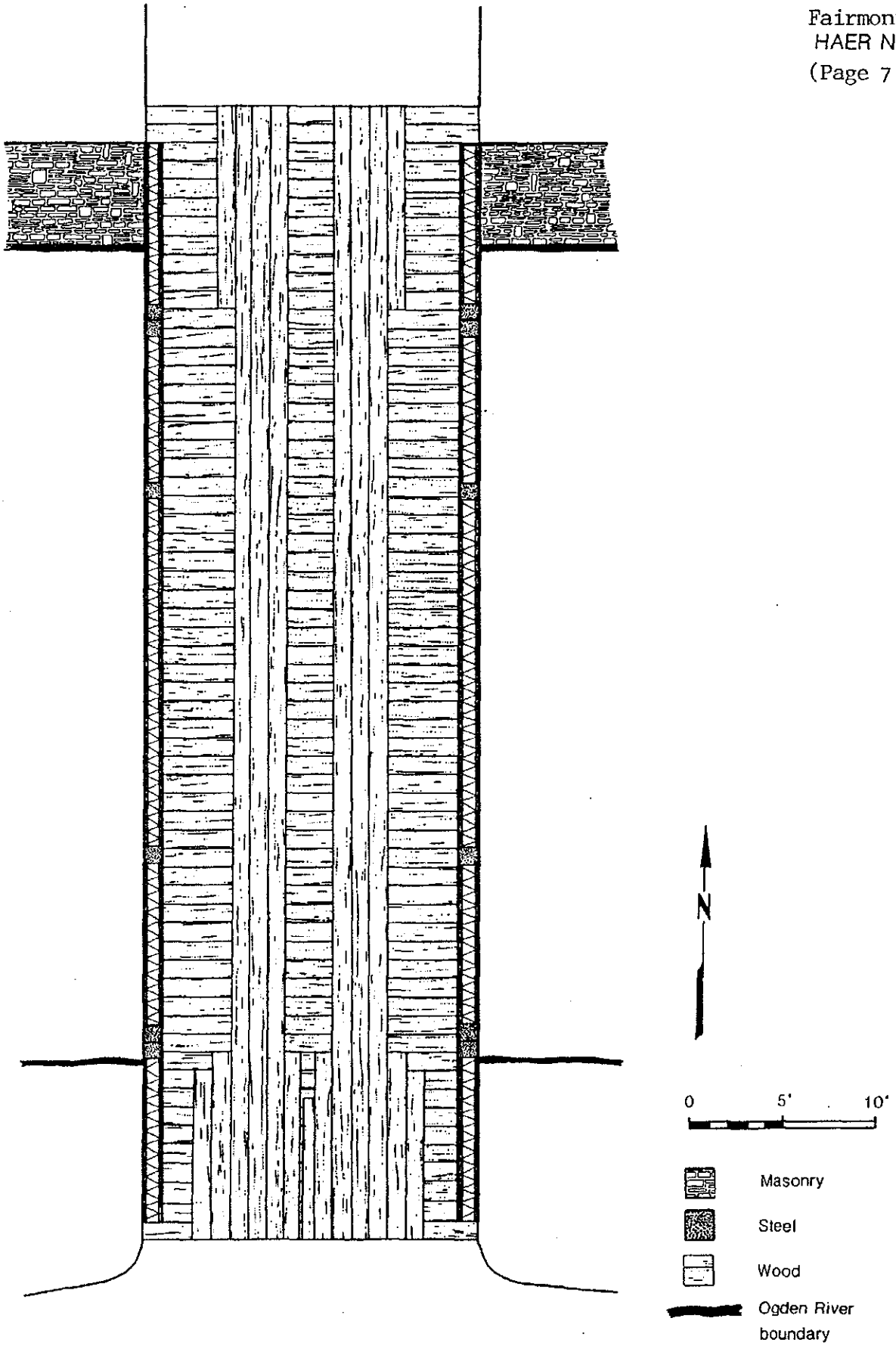
Utah Historical Records Survey Project, A History of Ogden, Ogden, Utah; Ogden City Commission, 1940.

B. Miscellaneous

Southworth Don, "Henefer Bridge," HAER No. UT-49, Library of Congress, Washington, D. C., 1987.

Southworth, Don, "Ogden Canyon Conduit," HAER No. UT-51, Library of Congress, Washington, D. C., 1988.

Utah Department of Transportation, "Truss Bridge Rating Sheet," Bridge Files, Salt Lake City, Utah, 1989.



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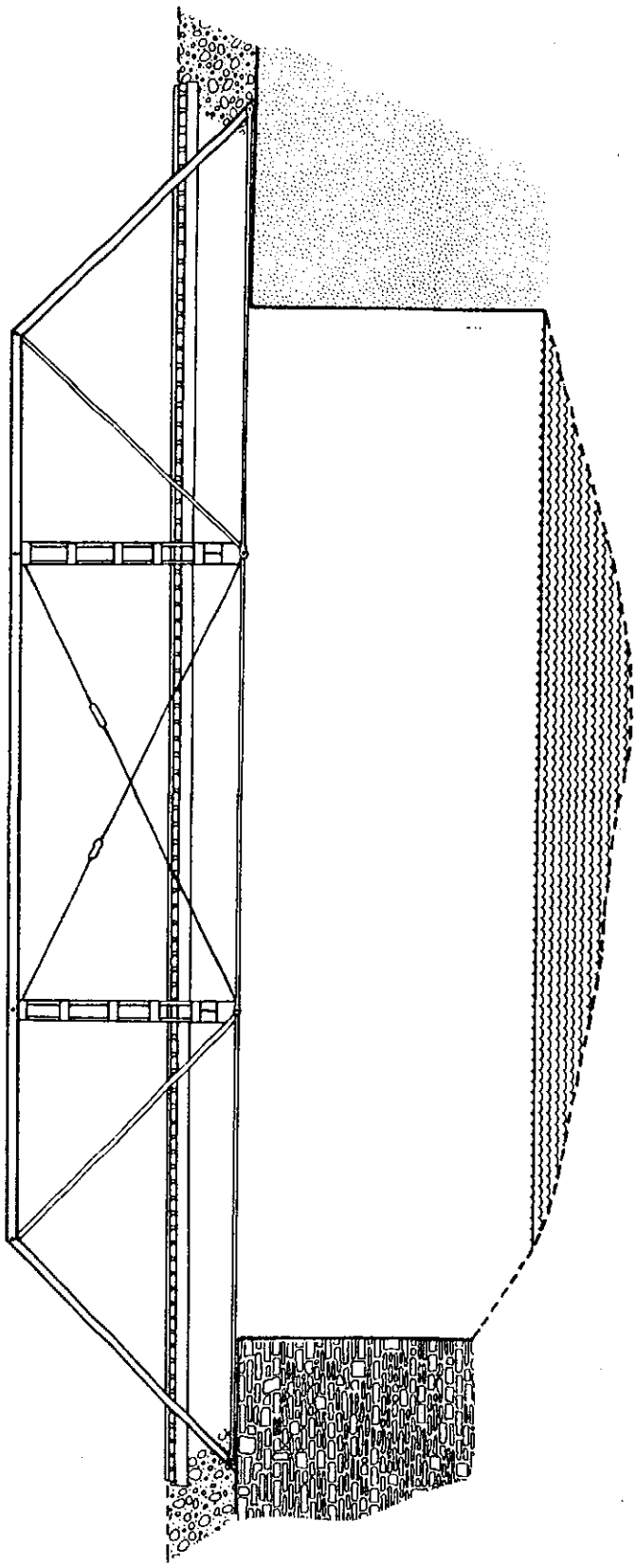

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Masonry

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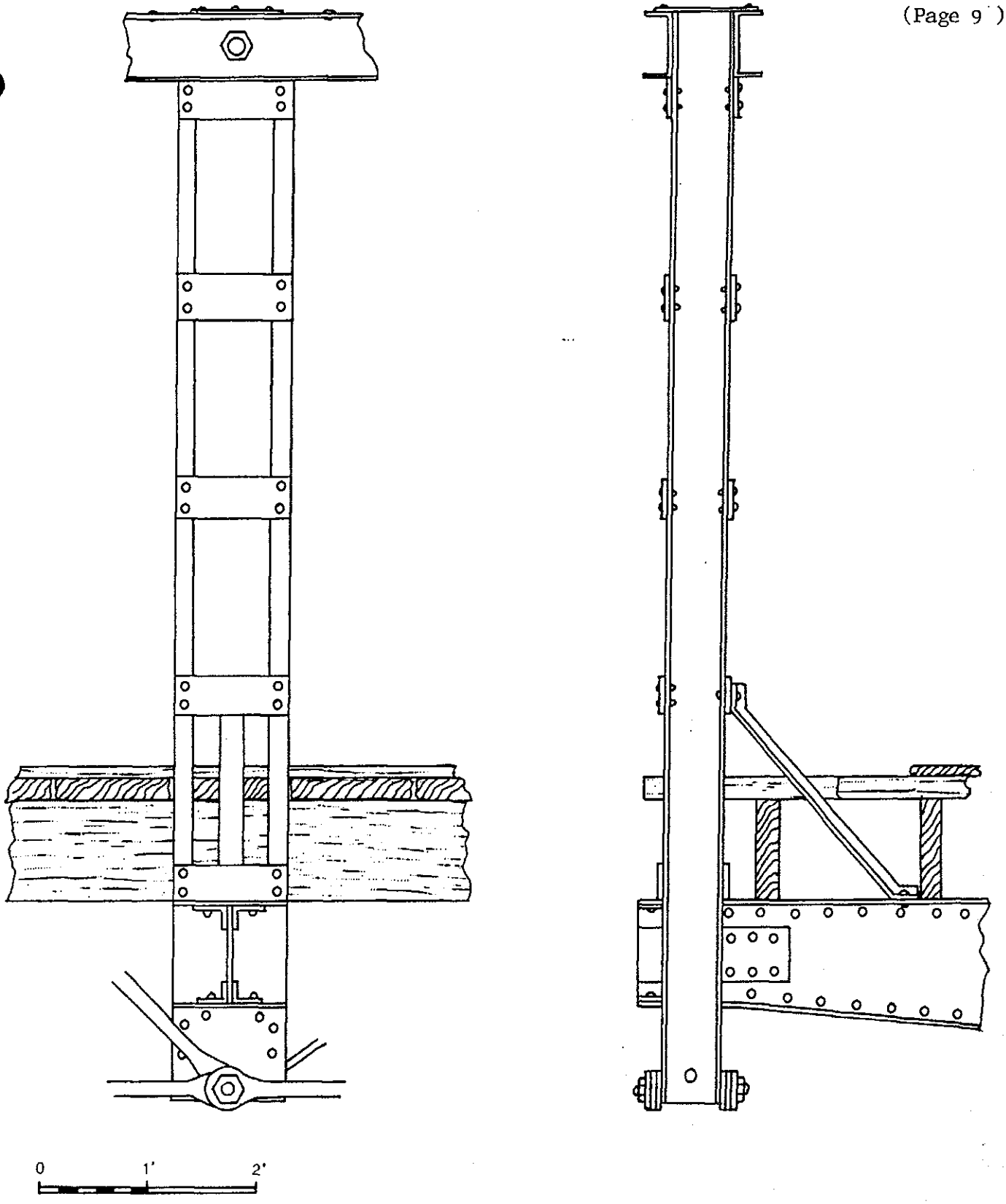
ELEVATION



VERTICAL MEMBERS